Work Order ID 96884 BLUE

February-08-13 10:33:33 AM

96884

Item ID: D2646

Revision ID:

Item Name: Aft Cap

Start Date: 2/07/13 **Start Qty:** 40.00 *40*

Required Date: 3/15/13 **Req'd Qty:** 40.00 *40*

Reference:

Accept *N900040100*

Setup **Start** *NS1* **Stop** *NS2*

Cust Item ID:

Customer:

Run **Start** *NR1* **Stop** *NR2*

Approvals: **Process Plan:** MLJ **Date:** 13-02-08 **Tooling:** ____ **Date:** ____

QC: ____ **Date:** ____ **SPC (Y/N):** ____ **Date:** ____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D2646	Rev C

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 *100* Purchasing Purchasing	PURCHASING **Memo** Issue P/O: 19068 1-Spin as per Dwg D2646 2-Material release note required	0.00 0.00	CL	13/02/11		40
110 *110* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs **Memo** Ensure Material Release Note is attached	0.00 0.00	40x			SP 13-3-7
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing **Memo**	0.00 DAS 27 0.00 13.3.7	46 (CW)			

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Work Order ID 96884

February-08-13 10:33:33 AM

96884

Item ID: D2646
Revision ID:
Item Name: Aft Cap

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Start Date: 2/07/13 **Start Qty:** 40.00 *40*
Required Date: 3/15/13 **Req'd Qty:** 40.00 *40*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Small Fab					40	0		JM13-3-7
Small Fab	**Memo**	0.00							
Small Fab	1-Drill using DT8026 as per Dwg D2646.2-Open holes to .297 as per Dwg D2646.3-Deburr								
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	**Memo**	0.00							
Quality Control									
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150						40		13-3-9	
HandFinish	**Memo**	0.00							
Hand Finishing									

27

1337

40 Coun

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
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Work Order ID 96884

February-08-13 10:33:33 AM

96884

Item ID: D2646
Revision ID:
Item Name: Aft Cap

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Start Date: 2/07/13 **Start Qty:** 40.00 *40*
Required Date: 3/15/13 **Req'd Qty:** 40.00 *40*
Reference:

Cust Item ID:
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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
165	Spray Painting per QSI005 4.2	0.00							
165 SprayPaint Spray Painting	Blue Memo Primer: 117319 Paint: 123253 clear: 118093	0.00				40	ø	ø	AS 13-3-15
175	QC14- Inspect Spray Paint	0.00 DAS 16 9-59 13/3/13				counts x40			
175 QC Quality Control	Memo	0.00							
180		0.00							
180 Small Fab Small Fab	Small Fab Memo Install inserts as per Dwg D2646	0.00				x40	ø	ML 13/04/02	

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
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- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
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Work Order ID 96884

February-08-13 10:33:33 AM

96884

Item ID: D2646
Revision ID:
Item Name: Aft Cap

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Start Date: 2/07/13 **Start Qty:** 40.00 *40*
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Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
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Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00				40	0	13-41-2	
190									
QC	**Memo**	0.00							
Quality Control									
200	Identify as per dwg & Stock Location: FR001	0.00				40	0	13/01/02	
200									
Packaging	**Memo**	0.00							
Packaging									
210	QC21- Final Inspection - Work Order Release	0.00				4		13/4/3	
210									
QC	**Memo**	0.00							
Quality Control									

13-041-3

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

February-08-13 10:33:40 AM

T

Work Order ID: 96884 *96884*

Parent Item: D2646 *D2646*

Parent Item Name: Aft Cap

Start Date: 2/07/13 **Required Date:** 3/15/13

Start Qty: 40.00 **Required Qty:** 40.00

Comments: IPP: G05.08.22Hole size revised in Step 5KJ/JLM
IPP Rev:H Changed Inserts 07-02-19 JLM
IPP rev I changed inserts 07.06.11 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
ALS7-1032-130 *ALS7-1032-130* ✓ Insert ALS4-1032-130		Purchased	No			110	Each	1,217.000	2 **	80	JLL	13/04/02	
D2646P *D2646P* Aft Cap		Purchased	No			180	Each	0.0000	1 **	40			

ALS7-1032-130 locations:

Location		Loc Qty	Loc Code	
FG		100		
	121444	100	M124163	x80
FP001		315		
	117717	27		
	118966	22		
	119530	73		
	119775	2		
	120181	12		
	121444	176		
	122474	3		
ST280		802		
	122763	18		
	124226	784		

SP 13-4-4.

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

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- Use-as-is ☐
- Work Order Update ☐

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- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
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Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

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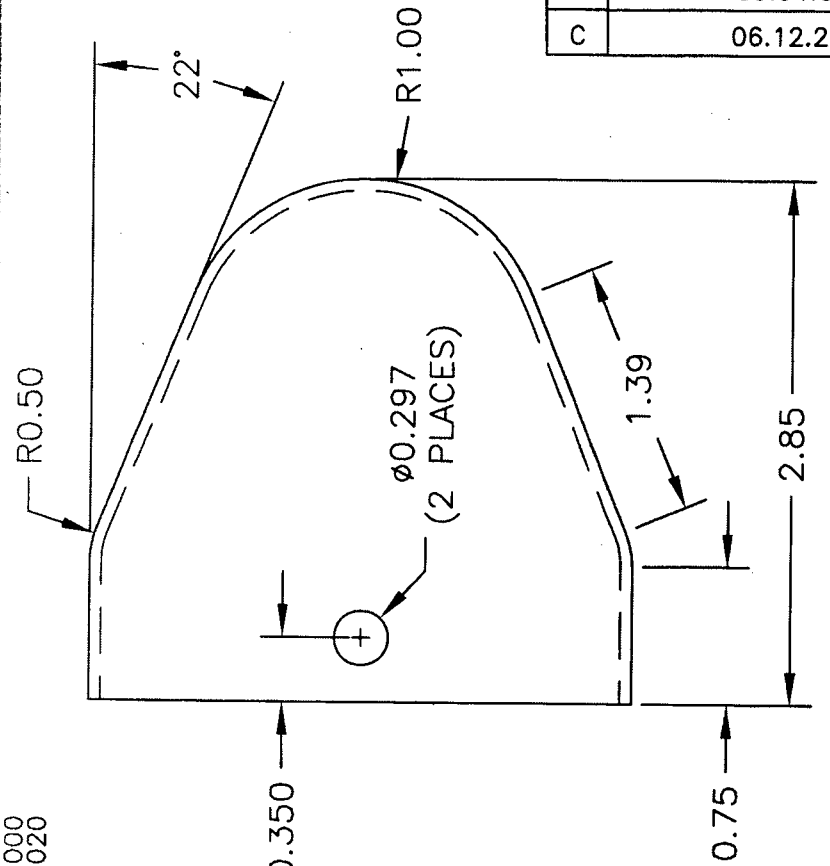
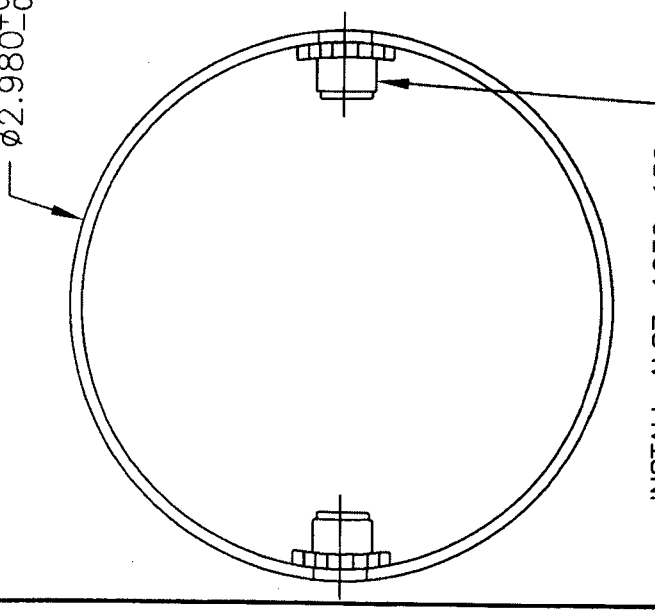
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
DS	PH	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO. / REV.
		D2646 / C
DATE		TITLE / SCALE
06.12.20		AFT CAP / 1:1

A	97.03.25	NEW ISSUE
B	05.04.01	CHANGE TO CLOSED INSERTS
C	06.12.20	CHANGE TO OPEN ENDED INSERTS





RELEASED
97.02.12

D2646 AFT CAP

1) MATERIAL: ALUMINUM 1100-0 0.063 THICK (QQ-A-250/1)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
3) ALL DIMENSIONS ARE IN INCHES
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

Sieg's Manufacturing Ltd. Packing Slip

Metal Spinning & Metal Fabricating
6236 205 Street, Langley, BC, Canada V2Y 1N7
Phone:(604)530 7455 Fax:(604)530-7490
Check out our website: www.siegsmfg.com

Packing Slip No.: 42183
Date: 03/04/2013
Page: 1

Sold to:	Ship to:
DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7	DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7
Order No.: 19068	**Sold By:** KAULBARS, ARLA
Shipped By:	**Ship Date:** 03/04/2013
Tracking No.:	

Item No.	Unit	Description	Quantity
D2646P	Each	Aft Cap	40

5013-3-7

Comment:

Sieg's Manufacturing Ltd.
6236 205 Street Langley, B.C. Canada V2Y 1N7
Ph#: (604)530-7455 fax#: (604)530-7490
arla@siegsmfg.com

INSPECTION REPORT

Date: March 4, 2013
Customer: Dart Areospace
Packing Slip: 42183

Part#:	Quantity	Material	Check holes	Insp. By.
2646	40	1100-0 0.064"	N/a	AK

Notes:

Material Certification Attached: Yes

A company of ThyssenKrupp Services

ThyssenKrupp Materials NA Inc.

ThyssenKrupp Materials NA
Copper and Brass Sales Division
95A Avenue 19044
V4N 4P2 Surrey
Tel.: 6048823493 Fax: 6048820686

Order number	Ord-pos	Del-pos		Part description
Customer PO	PO date	Quantity		Customer Part
MTR header	MTR type	Search criteria		Heat lot
C8A/1401020197	000010	900001	1100	Aluminum - O Aluminum Sheet 0.06300
1271	08.12.2011	80.000 ST		
Att_001.PDF	NCAP	930124417720110001		28149601A
C8A/1401020197	000010	900002	1100	Aluminum - O Aluminum Sheet 0.06300
1271	08.12.2011	8.000 ST		
Att_002.PDF	NCAP	930124192420110001		112843
C8A/1401020197	000010	900003	1100	Aluminum - O Aluminum Sheet 0.06300
1271	08.12.2011	12.000 ST		
Att_003.PDF	NCAP	930124417720110004		28149601A

Delivery number
2401597801
Date
12.12.2011

D Jewell

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY V2Y 1N7
CANADA

L-A-B
ACCREDITED
#L2068-1

ALERIS ROLLED PRODUCTS LLC
C/O ALERIS ROLLED PRODUCTS, INC.
P O BOX 480
LEWISPORT, KENTUCKY 42351

ALUMINUM CERTIFICATION SHEET

THIS IS TO ADVISE THAT THE MATERIAL PRODUCED FOR YOUR ORDER CONFORMS TO THE SPECIFICATIONS OUTLINED BY THE ALUMINUM ASSOCIATION. MATERIAL WAS MELTED, ROLLED, AND PROCESSED IN THE USA. THE TEST RESULTS RELATE ONLY TO THE SKID IDENTIFIED BELOW:

SKID : 427978

CUSTOMER: THYSSENKRUPP MATERIALS, NA
17901 ENGLEWOOD DRIVE
CLEVELAND OH44130

ORDER: 00337316-000001

LOT : 281496
SUBLOT : 28149601A

PO # : 124138
PART # :

DESCRIPTION: ALLOY 1100
TEMPER O
SIZE .0630 X 48.0000

SPECS: ASTMB209

DATE TESTED: 09/13/2011 CHEMICAL COMPOSITION - ASTM E1251

SI	FE	CU	MN	MG	CR	ZN	TI	GA	V	AL
.11	.60	.13	.00	.00	.00	.01	.00	.00	.00	99.13

DATE TESTED: 10/02/2011 MECHANICAL PROPERTIES - ASTM B557

	RESULTS	T42 RESULTS	T62 RESULTS
ULTIMATE TENSILE STRENGTH MIN (KSI)	13.5		
ULTIMATE TENSILE STRENGTH MAX	13.6		
ULTIMATE TENSILE STRENGTH AVG	13.6		
YIELD STRENGTH MIN (KSI)	5.9		
YIELD STRENGTH MAX	6.4		
YIELD STRENGTH AVG	6.2		
ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

NET SKID WEIGHT: 8,422

CHEMICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT
MECHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT

L-A-B
ACCREDITED
#L2068-1

ALERIS ROLLED PRODUCTS, LLC
C/O ALERIS ROLLED PRODUCTS, INC.
P O BOX 480
LEWISPORT, KENTUCKY 42351

ALUMINUM CERTIFICATION SHEET

THIS IS TO ADVISE THAT THE MATERIAL PRODUCED FOR YOUR ORDER CONFORMS TO THE SPECIFICATIONS OUTLINED BY THE ALUMINUM ASSOCIATION. MATERIAL WAS MELTED, ROLLED, AND PROCESSED IN THE USA. THE TEST RESULTS RELATE ONLY TO THE SKID IDENTIFIED BELOW:

SKID : 427979

CUSTOMER: THYSSENKRUPP MATERIALS, NA
17901 ENGLEWOOD DRIVE
CLEVELAND OH44130

ORDER: 00337316-000001

LOT : 281496
SUBLOT : 28149601A

PO # : 124138
PART # :

DESCRIPTION: ALLOY 1100
TEMPER O
SIZE .0630 X 48.0000

SPECS: ASTMB209

DATE TESTED: 09/13/2011 CHEMICAL COMPOSITION - ASTM E1251

SI	FE	CU	MN	MG	CR	ZN	TI	GA	V	AL
.11	.60	.13	.00	.00	.00	.01	.00	.00	.0(	99.1

DATE TESTED: 10/02/2011 MECHANICAL PROPERTIES - ASTM B557

	RESULTS	T42 RESULTS	T62 RESULTS
ULTIMATE TENSILE STRENGTH MIN (KSI)	13.5		
ULTIMATE TENSILE STRENGTH MAX	13.6		
ULTIMATE TENSILE STRENGTH AVG	13.6		
YIELD STRENGTH MIN (KSI)	5.9		
YIELD STRENGTH MAX	6.4		
YIELD STRENGTH AVG	6.2		
ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

NET SKID WEIGHT: 8,441

CHEMICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT
MECHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT

Skana Aluminum Co
Rolling Mill - Certified Metal
Certification of Properties and Analysis

SKANA ALUMINUM CO

Physical test: 112843 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales 6156 PO No: 5400107660-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	

Coil Ref. No.	1	2	3							
Tensile Strength KSI	13.03	13.12	12.81							
Yield Strength KSI	5.37	5.28	5.17							
% Elong. In 2 In.	31.70	31.70	31.60							

Coil Ref. No.										
Tensile Strength KSI										
Yield Strength KSI										
% Elong. In 2 In.										

Coil Ref. No.										
Tensile Strength KSI										
Yield Strength KSI										
% Elong. In 2 In.										

Coil Ref. No.										
Tensile Strength KSI										
Yield Strength KSI										
% Elong. In 2 In.										

Coil Ref. No.										
Tensile Strength KSI										
Yield Strength KSI										
% Elong. In 2 In.										

Remarks Tested By: NH Certified Date: 22 Sep 2011

NH .063 X 48,000 MF 3/3
ITEM# ALFLR01226
MEETS/EXCEEDS ASTM B209-10 SPECS

ThyssenKrupp Materials NA
Ken-Mac Metals Division
ThyssenKrupp

10/14/11

CERTIFIED CHEMICAL & MECHANICAL ANALYSIS

Sold To: Copper & Brass Sales
P.O. Box 5116

Southfield MI 48086-5116

Ship To: Copper & Brass Sales
404 Centura Court

Spartanburg SC 29303

Customer PO Number: 5400111624-R01
Ken-Mac Order/Item: 462255-1
Part No:
Item Description : MA .06300 48.000 144.000 1100 0 MFREG MFREG

Heat/Lot: 28149601A Mill Tag No : 427978
KM Stock No: 167291 Case Tickets: 752416, 752417, 752418

Chemical Composition

(Si)	(Cu)	(Fe)	(Zn)	(Al)
.1100	.1300	.6000	.0100	99.15

Mechanical Composition

Tensile PSI: 13,500 Yield PSI: 5,900 Elongation: 30.0 Hardness as Shipped:

Heat/Lot: 28149601A Mill Tag No : 427979
KM Stock No: 167292 Case Tickets: 752418, 752419, 752420

Chemical Composition

(Si)	(Cu)	(Fe)	(Zn)	(Al)
.1100	.1300	.6000	.0100	99.15

Mechanical Composition

Tensile PSI: 13,500 Yield PSI: 5,900 Elongation: 30.0 Hardness as Shipped:

Total Pounds: 16,498

A Page 1

Bob Harley - Corporate Quality Manager

To the best of our knowledge, the aforementioned material conforms to all applicable standards

L-A-B
ACCREDITED
#L2068-1

ALERIS ROLLED PRODUCTS, LLC
C/O ALERIS ROLLED PRODUCTS, INC.
P O BOX 480
LEWISPORT, KENTUCKY 42351

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CLEVELAND OH44130

PO # : 124138
PART # :

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TEMPER O
SIZE .0630 X 48.0000

SPECS: ASTMB209

DATE TESTED: 09/13/2011 CHEMICAL COMPOSITION - ASTM E1251

SI	FE	CU	MN	MG	CR	ZN	TI	GA	V	AL
.11	60	.13	.00	.00	.00	.01	.00	.00	.00	99.1

DATE TESTED: 10/02/2011 MECHANICAL PROPERTIES - ASTM B557

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YIELD STRENGTH MAX	6.4		
YIELD STRENGTH AVG	6.2		
ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

NET SKID WEIGHT: 8,422

CHEMICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT
MECHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT

L-A-B
ACCREDITED
#L2068-1

ALERIS ROLLED PRODUCTS, LLC
C/O ALERIS ROLLED PRODUCTS, INC.
P O BOX 480
LEWISPORT, KENTUCKY 42351

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ELONGATION MIN %	30		
ELONGATION MAX %	30		
ELONGATION AVG %	30		

T SKID WEIGHT: 8,441

EMICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT
CHANICALS CERTIFIED: /S/ SUSAN MUDD, QUALITY SYSTEMS SUPERINTENDENT

Skana Aluminum Company
Rolling Mill - Certified Metal
Certification of Properties and Analysis

Physical test: 112843 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales 6156 PO No: 5400107660-

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+Fe	0.20	0.05	..	..	..	0.1	..	0.05	

				Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
1	13.03	5.37	31.70	.193	.484	.057	..	..	..	..	..	..	..
				Al									
				BAL									
2	13.2	5.28	31.70	.185	.049	.059	..	..	..	..	..	..	..
				Al									
				BAL									
3	12.91	5.17	31.60	.162	.439	.062	..	..	..	..	..	..	..
				Al									
				BAL									

Remarks

Tested By: NH Certified Date: 22 Sep 2011

NH .063 X 48.000 MF 3/3
ITEM# ALFLR01226
MEETS/EXCEEDS ASTM B209-10 SPECS

DART aerospace
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO19068

Purchase Order Date 2/11/13
PO Print Date 2/11/13

Order From : VC-SIE001

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

Contact Name		**Buyer**	Chantal Lavoie
Vendor Phone	604 530 7455	**Requisition Nbr**	
Vendor Fax	604 530 7490	**Tax Resale Nbr**	10127-2607
Vendor Account Nbr		**Terms**	Net 30
		Currency	CAD
		FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED 2/13/13

Line Nbr	Reference / Revision ID / Vendor Part Number	Description / Mfg ID	Req Date / Taxable	Req Qty / Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2646P	Aft Cap	2/20/13 Yes	40.00 Each	FedEx Pl collect	$6.7000	$268.00

Special Inst: SPIN AS PER DWG D2646 REV. C
B96884

PO Total: **$268.00**

CERTIFICATE OF CONFORMITY REQ'D UPON DELIVERY

GP13-37

MATERIAL CERTIFICATION REQ'D UPON DELIVERY

No substitution or deviation without consent.
Certificate of Conformity or Material Certification required - (YES) NO

Change Nbr: 1 **Change Date:** 2/11/13